

IN THE SPECIFICATION

Please replace the Abstract with the following:

~~In accordance with a first aspect of the present invention, t~~Thermal response of a turbine component to application of thermal stimuli is automatically analyzed by regions of interest. ~~In accordance with another aspect, e~~Each region is may be analyzed for conformance for a number of thermal response metrics, in an absolute sense, and/or relative to each other. ~~In one embodiment, t~~The thermal response metrics may include the temperature threshold a particular region (e.g. the reference/primary region) exhibits a critical response size, and that the sub-region achieving the critical response size at the temperature threshold also has a critical shape. ~~In one embodiment, t~~The analyses may be performed using the pixel values of the constituting pixels of a picture frame of the turbine component's thermal response. ~~In accordance with yet another aspect, a~~A binary passed or failed conclusion is may be reached based on the results of the automated analyses.

Please replace paragraph number 7 with the following:

[0007] Recently, inspection methods involving thermal signatures of materials, in particular, infrared (IR) detection imaging, are being utilized to inspect and detect defects in the manufacturing of turbine components. A turbine component inspection method utilizing IR imaging involves applying differential thermal stimuli to the turbine components. Often times, applying differential thermal stimuli involves delivering a first thermal stimulus, such as a gas, at a high temperature to the component, and then, following the high temperature thermal stimulus, delivering a second thermal stimulus, such as a gas, at a cold temperature (i.e., cold, relative to

the high temperature thermal stimulus) to the turbine component. An example of an IR inspection apparatus may be found in co-pending U.S. Provisional Pat. Application No. ~~<insert number>~~60/339,765, titled ~~AN IMPROVED~~ TURBINE COMPONENT INSPECTION SYSTEM, filed on Nov. 1, 2001, and having at least partial common inventorship with the present application. The application is incorporated herein in its entirety by reference.

Please replace paragraph number 26 with the following:

[0026] Turbine component 108 represents a broad range of components, such as turbine blades, turbine vanes or other turbine components of the like, having e.g. internal passages or cooling channels that lend themselves to thermal inspection, i.e. inspection through analysis of the thermal signatures of these turbine components responsive to application of thermal stimuli. Similarly, turbine component inspection system 100 represents a broad range of turbine component thermal inspection system, including but are not limited to the inspection system disclosed in the aforementioned co-pending patent application number ~~<to be assigned>~~60/339,765.